



## Tessellation 24 (P)

Suite: Tessellation Party!

by Arya Akhavan (March 2013)

Angles for R.I. = 1.930

76 + 15 girdles = 91 facets

5-fold, mirror-image symmetry

80 index

$L/W = 1.019$   $T/W = 0.243$   $U/W = 0.231$

$P/W = 0.455$   $C/W = 0.194$

$Vol./W^3 = 0.215$

### PAVILION

P1	43.00°	80-16-32-48-64	Cut to centerpoint.
P2	42.97°	06-10-22-26-38-42-54-58-70-74	Meet at culet.
G1	90.00°	80-16-32-48-64	Set stone size.
G2	90.00°	06-10-22-26-38-42-54-58-70-74	Level girdle.
P3	42.00°	05-11-21-27-37-43-53-59-69-75	Meet P1, P2, G1, G2

### CROWN

C1	40.39°	80-16-32-48-64	Set girdle width.
C2	50.68°	06-10-22-26-38-42-54-58-70-74	Level girdle.
C3	42.67°	08-24-40-56-72	Meet G2, C2
C4	31.72°	04-12-20-28-36-44-52-60-68-76	Meet G1, G2, C1, C2
C5	33.02°	08-24-40-56-72	Meet C2, C3, C4
C6	27.73°	80-16-32-48-64	Meet C1, C4
C7	18.00°	08-24-40-56-72	Meet C4, C5
C8	18.00°	80-16-32-48-64	Meet C4, C6, C7
T	0.00°	Table	Meet C7, C8

This design is an expansion of the previous Tessellation's crown, continuing with the theme of pentagons and broken rhombi. I have a strong feeling that if I try to expand one tier out, I'll need to switch to a 120 index.

Works in materials from beryl to rutile (RI = 1.58 - 2.62) with no changes, but I prefer it in peachy zircons.

Suggested size = 8-12 mm

C:\Users\ARYADE~1\Pictures\DESIGN~1\WORKSI~1\Done\3TESSE~1.GEM